



Integrated Financial Management Program

Budget Formulation Project

Scope Document

February 11, 2002



National Aeronautics and
Space Administration

NASA Headquarters
Washington, D.C.

Scope Document for the Budget Formulation Project

February 2002

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1. Introduction

The purpose of this document is to identify the scope of the Budget Formulation Project. This document outlines what Budget Formulation Project requirements are considered within scope and what requirements are considered out of scope. Undecided scope items are identified along with a plan for addressing each. A draft set of design and operational performance measures are also identified. These measures, along with success criteria, will need to be finalized prior to project implementation. This document also outlines high-level schedule and budget information for the Project. Assumptions and issues are also identified within.

2. Project Scope

The Budget Formulation module encompasses bottoms up formulation of institutional, program, enterprise and Agency level budget formulation requirements. The module will support budget development, advocacy, internal/external reporting, and full cost budgeting and management. In addition, the module will transmit budget information to the IFMP Core Finance Module to establish full cost accounting controls. The content, form, and accessibility of budget information will support real-time management decisions. The configured Budget Formulation solution will include templates, reports, and associated processing within a software and data warehouse tool set to facilitate service pool planning, workforce planning, Center POP submissions and phasing plans, NASA budget aggregation, and the NASA budget submission and pass back process with OMB and Congress.

The IFM Program has selected Goddard Space Flight Center (GSFC) as the Lead Center to formulate a project to:

- design and develop a solution which supports the automation of standard Agency budget formulation processes;
- test the software configuration; and
- transition the solution to an operational status at all Centers.

The Budget Formulation Project will utilize the Agency-wide Budget Formulation Process Team to accomplish project objectives. The Project shall contract with an experienced contractor(s) to support the overall implementation. Currently, the targeted implementation contractor is Accenture. The software product to be implemented is overviewed below.

Early in FY 2001, SAP's mySAP.com product was selected as the Enterprise Resource Planning (ERP) product which best fit NASA's Core Financial requirements. This integrated product suite has extensive capabilities beyond financials and, as such, is the default product of choice for future IFMP efforts, including Budget Formulation. A six week study was conducted in November through December 2001 to assess the planning and budgeting capabilities of various SAP modules. Modules assessed were Controlling

(CO), Project Systems (PS), and Strategic Enterprise Management (SEM). The study findings concluded the Budget Formulation requirements are best met by the SEM solution. Though CO / PS have significant project management functionality and associated “bottoms-up” planning capabilities, configuring CO or PS functionality in SAP will affect the current Core Financial configuration and could impact current rollout plans. Further, scheduling a CO/PS based budget formulation capability after Core Financial rollout will delay implementation of the Budget Formulation module until FY 2004. An SEM-based budget formulation solution can be developed in parallel to Core Financial.

For the above mentioned reasons, SAP’s SEM has been chosen as the best near term solution to meet NASA’s budget formulation requirements. SEM is a powerful toolkit that provides the ability to develop templates, data structures, data flows and reports that support standard Agency budget formulation processes. The single potential gap identified at this time with SEM is its ability to load detail project plans from SEM to PS, a key component of the Core Financial module. SAP has committed to develop that capability, known as a retractor, at no cost to NASA.

3. Functional Drivers and Performance Measures

IFMP is aligned with the Manage Strategically crosscutting process defined in the NASA Strategic Plan to provide critical information management capabilities to internal customers and communication among both internal and external customers. Agency and Enterprise Strategic Plans act as a catalyst for assessment of business processes. To accomplish its mission and support the crosscutting activity, IFMP has identified five (5) business objectives that are characterized as Agency Business Drivers (IFMP Level I requirements). Functional Drivers are those Level II requirements that materially contribute to achievement of the Agency Business Drivers. Key success measures are defined for each of the Functional Drivers. Thus, there is a continuous flow of accountability from the mission support objectives identified in NASA’s Strategic Plans to the applicable financial and human resources management process and technological improvements to be provided by IFMP in support of those objectives, and ultimately to the functional objectives to be achieved by the individual IFMP Projects.

Various performance measures will be employed to gauge the Budget Formulation Project’s success, both during implementation and during operations (post-implementation). During the implementation phase, performance measures are segregated into (a) project measures focusing on cost, schedule, and risk, and into (b) design measures, which target how well the acquired solution meets the basic functional needs. After implementation, operational measures will gauge the improvements resulting from the new solution. Table 1 below identifies the current draft set of design and operational performance measures.

In Table 1, many of the performance measures state the capability will be provided to obtain data at "various levels of the organization". The levels of the organization (e.g., Enterprises, Programs) to be supported by the Budget Formulation module are dependent on the organizations defined by the Core Financial configuration.

Table 1. Functional Drivers and Draft Performance Measures.

Business Driver	Budget Formulation Functional Driver	Design Performance Measure	Operational Performance Measure
Provide timely, consistent and reliable information for management decisions	Establish standard and efficient processes to provide budget data for management analysis and reporting	Demonstrate an Agency-wide reporting capability at various levels of the organization using predetermined formats and an ad hoc reporting capability. Demonstrate the system supports Agency-wide budget process flows, including a standard process for the Centers to submit data to the Enterprises.	Percentage of the Agency's budget formulation reporting requirements provided for various levels of the organization, as specified in the process flows and documented reporting requirements. Percentage of data products submitted from the Centers to the Enterprises using a standard process and schedule.
Improve NASA's accountability and enable full cost management	Implement a system to support formulation of components of a full cost budget	Demonstrate the ability of the system to support formulation of budget requirements for all elements of a full cost budget.	Percentage of projects for which all elements of a full cost budget were formulated using the system.
Achieve efficiencies and operate effectively	Achieve efficiency and an overall reduction in maintenance costs with the elimination of multiple budget systems Integrate budget data with the Core Financial IFM module to support budget execution	Demonstrate a single Agency system for the bottoms-up formulation of program budget requirements and the realization of top down budget decisions. Demonstrate the ability of system to develop an operating plan and transfer the formulated control budget and detailed plans to the Core Financial module.	Percentage of Center supported legacy budget formulation systems throughout the Agency (used to support budget planning at the 11 digit UPN level and above) that are eliminated. Percentage of yearly operating plans in Core Financial/Funds Management that are established and automatically transferred from Budget Formulation.

Business Driver	Budget Formulation Functional Driver	Design Performance Measure	Operational Performance Measure
			Percentage of detailed plans established in the Budget Formulation system that are automatically transferred to the Core Financial system for comparison of actuals to plans.
Exchange information with customers and stakeholders	Provide an integrated and consolidated budget information source to facilitate sharing of data across various levels of the organization	Demonstrate the ability to support Agency, Enterprise, Lead Center, Performing Center, Program and Project budget processes in a consolidated system that minimizes duplication of data.	Percentage automation of the receipt, routing and approval of multi-year budgets, using one system at various levels of the organization.
Attract and retain a world-class workforce	Establish an automated system that reduces tedious and highly manual processes to enable users to do their jobs more effectively	<p>Demonstrate the automation of key budget development activities at various organizational levels using standardized templates, processes and data controls.</p> <p>Demonstrate the ability to compare and analyze data from multiple formulation cycles, including the ability to produce reports showing detailed traceability among cycles.</p> <p>Demonstrate usability of the system through the involvement of a user focus group during the design phase.</p>	<p>Percentage of user evaluations that rate the system highly effective in supporting standard formats and processes.</p> <p>Percentage of user evaluations that rate the system highly effective in comparing data from multiple formulation cycles.</p> <p>Percentage of user evaluations that rate the system highly usable.</p>

All measures, associated success criteria, and processes for gathering the data to support these measures, will be finalized by the end of the following Project phases.

Performance Measure	Finalized at end of
Design	Project Formulation
Project	Project Formulation
Operational	Agency Design

4. Assumptions

The following assumptions are applicable to the current scope of this project:

1. A budget formulation capability will be provided using a SAP SEM/BW solution.
2. A basic capability will be rolled out to NASA HQ and all Centers not later than February 2003 that allows the distribution of Agency guidelines for the FY 2005 budget, the development of project and service pool plans, and the development of FY 2004 initial phasing plans. This initial rollout will be followed by additional capabilities in the Budget Formulation module to enable the end-to-end FY2005 budget processes to be accomplished, including the submission to OMB in September 2003.
3. The requirements in this document represent the total functionality to be available at the completion of the rollout.
4. The rollout of budget formulation will not impact the implementation of Core Financial.
5. SAP has committed to developing, at no cost to NASA, a retractor to load detailed plans from the Budget Formulation SEM module to the Core Financial Project Systems.
6. During the project formulation phase, preliminary risk related components will be designed and developed, as documented in the standard Agency process flows for budget formulation. This is a risk reduction activity undertaken to confirm the viability of the SAP tool set to provide the data processing capabilities necessary to adequately support the entire Budget Formulation Project. In order to support this, the Integration Project will provide a SEM 3.1/BW 3.0 BASIS environment with a BW 2.1C repository by early February 2002.
7. The Center level data structures developed for Core Financial will be used by Budget Formulation.
8. The Budget Formulation solution can be rolled out to a Center for planning and budgeting purposes independent of the Core Financial roll out.
9. Accenture and SAP are able to provide consistent consulting resources with in-depth expertise in SEM application development.
10. SAP has committed to partnering with NASA to develop a generic federal SEM Budget Formulation solution.
11. Participation in federal focus groups and government wide configuration or generic federalization activities will not impact the project schedule or cost.

5. Requirements

Utilizing the Level II Functional Drivers, the Agency-wide Budget Formulation Process Team derived a more detailed set of functional requirements. These Level III requirements are specified below.

In-Scope / Out-of-Scope Requirements

Table 2 provides the high-level requirements, separating the in-scope items from the out-of-scope items. Requirements are segregated into Functional, User, Interface, and Technical requirements.

Table 2. Requirement Line Items.

Category	In Scope	Out of Scope
Functional	<p>Automate Agency standardized key budget formulation processes to support the various levels of the organization: Project, Program, Functional Organization, Center, Enterprise and Agency.</p> <p>The key budget processes are:</p> <ul style="list-style-type: none"> • workforce planning (FTE & Contractor planning) • calculation of FS-41 funding requirements • calculation of travel funding requirements • developing a service pool business plan • building a Center G&A plan • building direct project requirements • building a Center program full cost operating plan (POP) submission • building an enterprise plan • building a corporate G&A plan • formulating phasing plans • building the Agency submission to OMB • building the Congressional budget 	<p>Earned value analysis</p> <p>Workforce planning by individual or skill level</p>
	Support the budget formulation and integration process for Lead Center programs and projects	
	Ensure integrity of multiyear budget data for multiple budget cycles maintaining chronological traceability for changes, with supporting narrative and schedule data	
	Ability to do "what-if" analyses on funding alternatives, including adding, deleting, and modifying data values at specified levels of the Financial Classification structure	

Category	In Scope	Out of Scope
	Ability to make summary level adjustments without affecting lower level details and notify users to distribute changes to the lower levels of the financial classification structure upon approval and/or finalization of summary level adjustments	
	Produce Agency (e.g. OMB) and Center defined standard reports <ul style="list-style-type: none"> • An adhoc query capability that allows any combination of financial classification structure elements, including a roll-up of detail data • Ability to produce reports in tabular format displayed on-line or in printed form • Ability to produce reports in graphical format displayed on-line or in printed form 	
	Automated support of interactions between budget planners, service providers and approvers, with the ability to monitor status, imbalances and changes	
	Ability to accommodate planned budget and workforce information at any level of the financial classification structure, phased on a monthly basis, and identifying annual requirements for multiple years	
	Ability to compare and analyze data from multiple budget formulation cycles, including prior budget cycles	
	Ability to maintain Headquarters guidelines and narrative documentation and identify changes at all levels of the Financial Classification structure	
User	Support up to 1,000 Budget Formulation users Agencywide	
Interfaces	Ability to automatically retrieve from the Core Financial system separate prior program year and current program year available funding and combine prior and current program years within a fiscal year at a user defined level of the Financial Classification structure	
	Ability to establish a single year budget and transfer the formulated control budget to the Core Financial system for funds control	Any plan versus actual reporting (Core Financial scope)
	Ability to download master data, actual data, and previous balances to the lowest level of the financial classification structure from Core Financial into the budget formulation Business Warehouse	
	Ability to establish detail plans and transfer to the Core Financial system for comparison to actuals	
Technical	Authorized users can easily navigate and execute the budget formulation module functionality to obtain the desired results, as specified in the requirements	

Category	In Scope	Out of Scope
	Users view the functionality represented by the budget formulation module as a cohesive, integrated solution for budget formulation	
	Provide ability to download data into SAP supported desktop applications and accept uploads from the same type of applications (e.g. Excel, Word)	

Undecided Requirements

Table 3 below lists current undecided requirements and associated plans for resolving whether the requirement will be included in the project scope. Undecided requirements shall be resolved prior to completion of project formulation and, if considered within scope, shall be incorporated in the project plan.

Table 3. Undecided Requirements Line Items.

Category	Undecided	Plan for Resolution
Functional	Support Government Performance Results Act (GPRA) requirements	Investigate SAP's capabilities to support this requirement. If the capabilities exist, also assess the impact (cost / schedule) of implementing. Provide the results of these analyses to the Program Office with recommendations.

6. Implementation Issues

During Formulation, an implementation strategy will be proposed and the resources required to support implementation will be determined. Once the required level of resources to support implementation is determined, Centers and Headquarters must assess their ability to support the implementation. The results of that assessment will determine the implementation approach and schedule.

7. Resources

This section presents schedule and budget information particular to the Budget Formulation Project. Table 4 below summarizes major schedule milestones.

Table 4. Schedule Summary. Budget Formulation

Project Phase	Schedule
Formulation Plus	February 2002– April 2002
Agency Design	May 2002 - December 2002
Rollout	January 2003 - September 2003

Table 5 below summarizes high-level budget information for the Project. This budget does not include rollout costs which would be incurred by the Enterprises / Centers. The budget numbers below were derived from a Business Case Analyses, and assumed the solution would be totally custom developed. Since then, it's been concluded that SAP's SEM/BW can be used. Thus, the budget below is considered as a "worst case", and should be viewed as such. This shall be considered by the project in developing its funding plan.

Table 5. Budget Summary (in thousands)

FY02	FY03	FY04	FY05	FY06
\$3,871	\$6,772	\$3,372	\$738	\$520

8. Deviations from IFMP Program Plan and Processes

None identified at this time.